CHILD WELFARE DIGITAL SERVICES (CWDS) UPDATE



VISION STATEMENT

"We will establish and maintain an innovative statewide 21st century information technology application that aids child welfare stakeholders in assuring the safety, permanency, and well-being of children at risk of abuse and neglect."

Child Welfare Digital Services (CWDS) is a software product development organization within the Office of Systems Integration (OSI), which is responsible for two systems: The Child Welfare Services / Case Management System (CWS/CMS) and the Child Welfare Services-California Automated Response and Engagement System (CWS-CARES). In November 2015 the CWS-CARES Project embraced an agile approach to software design and development. Rather than procuring a monolithic, one-time solution, we will instead develop and integrate a suite of digital services through which we can deliver continually improving support and assistance.

HIGHLIGHTS

The Project released CARES 2.2 to Core Constituents on February 9, 2019, and statewide release on February 25, 2019. CARES 2.2 included enhancements to Child and Adolescent Needs and Strengths Assessment (CANS), Child Welfare History (Snapshot) and role-based updates to the CWS-CARES Dashboard. Snapshot is currently only accessible to the Core Constituents as the Project continues to work on future enhancements which focuses on search result improvements and reducing the data latency.

The Project made additional progress on the Acceleration Strategy during the month of February. With respect to legacy integration and synchronization, a team focused on testing a complex Intake scenario using a shared database to achieve synchronization between a fundamentally improved CARES model and the existing (more constrained) legacy model. The goal is to determine the technical and economic feasibility of releasing new CARES functionality incrementally to production while maintaining the integrity of the CWS-CMS system. The Project timeboxed this effort to 4-sprints which will be completed in March 2019. The Project also researched the technical infrastructure that would be required should the Project move forward with the shared database approach.

In addition, Phase II of the Platform as a Service (PaaS) Proof of Concept (POC) continued with mid-point check-in meetings on February 14, 2019. This mid-point focused on answering any questions related to the complex relationship scenario being used in developing the solution as well as synchronization logic with the "mimic" legacy system. The vendors will submit their final deliverables on March 8, 2019 with product demonstrations scheduled on March 11, 2019. The Project will complete the PaaS POC Phase II evaluations and will present the information to Executive Leadership Team (ELT) by the end of March 2019.

Parallel to the PaaS POC, the Project also concluded its market research of alternative PaaS solutions. The research included detailed product demonstrations from six PaaS vendors and two Rapid Application Development vendors. The Project followed up with additional presentations from two vendors on their Health Record solutions utilizing complex relationship models, which more closely align to the child welfare relationship modeling. Additional due diligence also included meetings with Arizona, Colorado and Delaware states to learn more about their child welfare automation projects. The review forum consisted of participants from key business stakeholders including California Department of Social Services (CDSS) staff, County Constituents, and technical Project staff. A formal summary report was presented to ELT on February 27, 2019.

KEY PROJECT MILESTONES

Milestone	Planned Finish Date	Actual Finish Date	Status	Notes
Release CARES 2.1	12/2018	1/22/2019	Completed	CWDS released to production on 12/9/2018, with final statewide release on 1/22/19. This completes the implantation of CARES 2.1 statewide.
Release CARES 2.2	02/2019	02/25/2019	Completed	CWDS released to production CARES 2.2 on 2/9/19, which included CANS 1.1 and Snapshot 1.5. CARES 2.2 was made available for Statewide use on 2/25/2019.
Release CARES 2.3	04/2019		In Progress	CWDS will deploy CARES 2.3 on 4/23/2019 is targeted to include IDM 1.4 and Facility Search 1.2.
Release CARES 2.X	TBD		Not Started	The Project is in the process of defining the timing of CARES 2.X.
Procure Implementation Services Contract II	12/2018		In Progress	The Implementation Services will prepare counties and tribes for the rollout of Digital Services. Bid evaluations were completed the week of 2/4/2019. Contract was approved by OSI Legal on 2/22/2019 and is awaiting ACYF final approval of contract. NOTE: ACYF approval needed for contract execution.
IT Operations Advisor	5/2019		In Development	Drafting SOW.
Information Security	4/2019		In Progress	The SOW is currently in review with management.
JIRA Project Scheduler	3/2019		In Progress	Provide scheduler and Jira Admin services. Nine bidder responses received on 3/1/2019; evaluations scheduled for early March.
Communications Advisor	5/2019		In Development	Drafting SOW.

Note: With the focus on one product feature set at a time, the Project has temporally suspended use of Product Increment (PI) Planning until further notice. During this time, the Project will work on determining the best planning strategy that will allow for proper planning and further Project development.

FEBRUARY 2018

DIGITAL SERVICE UPDATE

Product Feature/Service

Progress to Date

The **Case Management** digital service will provide county Child Welfare Agencies a comprehensive, automated case management system that fully supports the child welfare practices and incorporates the functional requirements mandated by federal regulations. The CANS product feature set is a component within Case Management.

CANS is a key strategy for the Integrated Core Practice Model (ICPM) and a pivotal aspect of Continuum of Care Reform (CCR). CANS will help set and track progress towards behavior goals, supporting better placement matching and faster progress to safe permanency.

CANS 1.1

 Populate child client information with CWS/CMS legacy data to eliminate data entry.

Improve usability

- Radio buttons used to select item ratings, rather than using a drop down.
- User can add comments to the assessment at the domain and item level.
- User is prompted to select the age appropriate CANS template.
- · User can delete an assessment.
- Ratings for each assessment are summarized and presented in a table to provide information at a glance.

CANS dashboards based on user:

- Users identified as supervisors will be presented with a dashboard that includes information about their staff's CANS caseload.
- Supervisors can drill down to assessment specifics after selecting a worker's caseload.
- Users identified as case carrying workers will be presented with a dashboard that includes their active caseload.
- User can select a client from their caseload.
- Users without a caseload assignment or staff assigned will be presented with a dashboard that includes a search bar.
- User can search CWS/CMS legacy for clients.

Capture county CANS application usage metrics.

- The number of CANS assessments completed monthly.
- The number of CANS assessments in progress monthly.
- Number of users accessing a CANS assessment monthly.
- The number of sessions it took to complete a CANS assessment.
- CANS Change Log allows users to see the status history of when and who made changes to an assessment.

 CANS 1.1 was released to production on February 9, 2019 to Core Constituents with a statewide implementation on February 25, 2019, as a part of CARES 2.2

Implementation

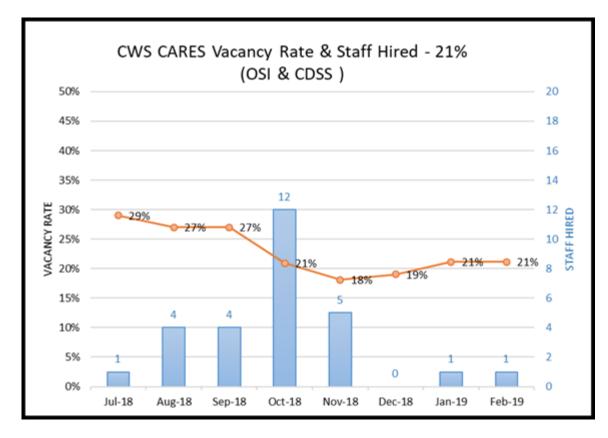
- Deployed CARES 2.2 Statewide on February 25, 2019.
 - Currently in the post deployment evaluation process
- Delivered CARES 2.2 (CANS 1.1) Train the Trainer user training.
- Finalized CANS 1.1 web-based training materials
- Delivered County Change Agent training on 2/21/19 with upcoming trainings taking place on 3/19 and 4/23.
 - Complied Change Agent survey results and presented findings.

Product Feature/Service		Progress to Date					
	Foundational Technical Tasks						
Extend Identity Management (Cognito)		Progress	Status				
<u>Ider</u>	ntity Management 1.3	Complete – 100%	Deployed December 2018.				
•	User administration portal	Complete 10070	Deployed December 2016.				
•	Administrator roles for State, County, and office						
•	Legacy privilege integration						
•	Policy and security compliance (failed log on, password						
l al a u	resets etc.)						
	ntity Management 1.4	In Progress – 50%	Started work on user lock out				
•	New workflows to add and support users who do not have a CWS/CMS login		rules. Continued work on				
•	User role and privilege management for local administrators		administration roles that allow				
•	User data set to assist with user creation and validation		CARES administrators the				
	processes		ability to unlock accounts.				
•	Further refinement of Global, State, County and Office		,				
	administrator's roles/permissions						
•	User/Role access restrictions						
Sec	curity Infrastructure	Progress	Status				
•	Postgres database auditing	In Progress – 75%	Team continued working on				
	Deliverable – ensure all audit logs are saved and		audit logs.				
	archived.	0 1 1 1000/					
•	VPN hardening and security improvements	Complete – 100%	Completed January 2019.				
	 Deliverable – ensure user passwords conform to OSI password complexity and expiry rules, implement audit 						
	changes in spider VPN and implement user validation						
	report.						
•	Web gateway hardening	In Progress – 50%	Team continued work on web				
	Deliverable - Implement Secure Technical		hardening				
	Implementation Guidelines for Apache Server.						
•	Database improvements	In Progress – 75%	Team continued work on				
	Deliverable – create unique database credentials for		developing unique credentials				
	CANS.		for CANS regression testing,				
•	Rapid 7 app spider implementation	Complete – 100%	Completed January 2019.				
	Deliverable – automate the login for rapid 7, run rapid 7 Deliverable – automate the login for rapid 7, run rapid 7 Deliverable – automate the login for rapid 7, run rapid 7 Deliverable – automate the login for rapid 7, run rapid 7						
	against CARES app in pre-int, include in automated pipeline and implement auditing.						
•	Pipeline environment hardening	Complete – 100%	Completed Innuary 2010				
	Deliverable – support new versions of Elasticsearch	Complete – 100%	Completed January 2019.				
	and Kibana.						
Imp	rove Pipeline/Factory Improvement Team (FIT)	Progress	Status				
•	Build process automation	In Progress – 50%	Updated Licensing Shared				
	 Deliverable – automation of manual build steps and 		Library Component to produce				
	processes including smoke tests, code quality		CSV file for Java based projects				
	scanning, licensing validation, security scans and						
•	integration testing. Deployment process automation	In Progress – 25%	Continuing to build a complete				
•	Deliverable – automation of deployment steps and	III Flogress – 25 //	backlog and prioritize backlog				
	processes including browser tests, performance tests,		efforts.				
	database structure change process, load tests and						
	release notes.	La Dan and a 500/	Developed 11 (1 11				
•	Configuration management	In Progress – 50%	Developed scripts for health				
	 Deliverable – automate deployment checklist, standard 		check codes and ensured all health checks are running in				
	pull request process and developer quick start		active CARES environments				
	introduction.		(testing, demo, training, etc.)				
•	High availability		, 3, 444,				
	 Deliverable – rollbacks in environments when error threshold is reached and ensure state and federal HA 	Not Started – 0%	Not Started				
	requirements are met.						
•	Monitoring						
	Deliverable – resolve false positives, ensure state	N + O + + + OC +	N. C. C. L.				
	guidelines for monitoring are met and ensure New Relic	Not Started – 0%	Not Started				
	is configured correctly to ensure valid monitoring.						
•	Disaster recovery						

	Product Feature/Service	Progress to Date			
	Deliverable – ensure state and federal disaster recovery requirements are met.	Not Started – 0%	Not Started		
Co	de Quality	Progress	Status		
•	Component library Deliverable – finish building and implement the component library across all development teams. Code quality standards Deliverable – identify and implement developer testing standards, shared code standards and user story standards.	Complete – 100% complete Complete – 100% complete	Team completed the Component Library for use by Development teams. Team completed developing code quality standards for shared code and testing standards.		
•	Code analysis Deliverable – fully implement and configure SonarQube/code climate and ensure all code checked into the pipeline is scanned.	In Progress – 75% complete	Fixed major and critical code issues in Facility Search and County administration and started fixing code issues within the CWS-CARES dashboard.		
Le	gacy Integration and Synchronization	Progress	Status		
•	 Demonstrate updating child record: CARES to CWS-CMS Deliverable – proof of concept that shows updating a child record in <i>one</i> direction Deliverable – proof of concept that shows updating a child record in <i>both</i> directions 	Complete – 100%	Completed as part of synchronization strategy POC		
•	 Investigate integration and synchronization technologies Deliverable – spike on integration and synchronization tools, including Kafka, Boomi and Mulesoft. Simulate synchronization between old and new domain models using complex compariso (the convictores of old). 	Complete – 100%	Completed as part of synchronization strategy POC		
•	 models using complex scenarios (the co-existence of old and new Relationship and Household models, for example) Deliverable – proof of concept that simulates data synchronization for a set of realistic child welfare scenarios, ranging from adding a field to an existing concept to mapping between new and old data structures. Prove approach to exception handling, including low-latency use cases 	Cancelled	This task was cancelled as the Project decided that synchronization is not the approach to continue exploring. New legacy approach is collaborating with IBM in a Shared DB approach		
	 Deliverable – proof of concept that shows exception handling for all synchronization simulations. 	Cancelled	Work started as part of synchronization strategy POC, but this task was stopped, as the Project decided that synchronization is not the approach to continue exploring. New legacy approach is collaborating with IBM in a Shared DB approach.		
Pre	oduct Blueprinting and	Progress	Status		
	 main and Data Architecture Approach Develop, in concert with the Product Blueprinting initiative, the new CARES Domain Model Deliverable – domain model, specified in UML class model notation, supporting all child welfare processes, including Hotline, Investigations, Case Management, Courts, Licensing, Resource Management, Eligibility, Financials and Administration. The model will also reflect the populations and metrics required to produce Federal and state reports and manage to statewide indicators. Analyze, in concert with the Legacy Integration and Synchronization team, Data Conversion strategies 	In Progress – 50%	Completed the Courts, Case Management and CALS blueprinting. Additional detail work is taking place for Hotline. Need to discuss additional CDSS program involvement for CALS. Initial planning discussions have started for launching the Financial Management & Resource Planning blueprint work.		
	Deliverable – technical report summarizing the technical and economic feasibility, in the context of each Legacy Integration and Synchronization option, of various Data Conversion strategies, including incremental conversion to a Staging environment.	In Progress – 50%	Concepts on including data exchange between the two applications & shared database are being developed for the planned extension of the IBM M&O services contract		

Product Feature/Service		Progress to Date		
•	Conduct, in concert with ongoing legacy (CWS-CMS) data quality analysis, a CARES continuous data quality monitoring proof of concept. • Deliverable – proof of concept demonstrating how New Relic (and/or other tools) can be used to instrument the CARES product to measure data quality, including data entry lag, and alert users to take corrective action.	In Progress – 50%	Team is continuing to evaluate the options for technical infrastructure needed to support APIs within the legacy data base	

STAFFING VACANCY CURRENT VACANCY RATE: 21%



Current Vacancies - 22 of 104 CWS-CARES positions. The CWS-CARES vacancy rate remained unchanged at 21 percent as of February 28, 2019.

Entity CWS- CARES	Classification [New]	Service Team	Date Vacant	# of Days Vacant	Efforts/Notes
OSI	Information Technology Associate	IT Support	1/2/2019	56	Duty Statement (DS) under construction
OSI	Information Technology Associate	Developer	7/1/2017	606	DS to be re-written due to new classification requirements.
OSI	Information Technology Associate	Project Management Analyst	1/24/2019	34	DS to be re-written due to new classification requirements.
OSI	Information Technology Associate	Security Analyst	7/1/2017	606	DS under review by HR
OSI	Information Technology Manager I	Product Planning Chief	7/1/2017	606	Position on hold.
OSI	Information Technology Specialist I	Developer	7/1/2017	606	DS under construction
OSI	Information Technology Specialist I	Information Security Analyst	7/1/2017	606	Position on hold.
OSI	Information Technology Specialist I	Developer	7/1/2017	606	DS under construction
OSI	Information Technology Specialist I	Application Architect	7/1/2017	606	DS under construction
OSI	Information Technology Specialist I	Senior Project Manager	12/3/2018	86	FFD 2/8/2019. Interviews are scheduled.
OSI	Information Technology Specialist I	Senior Project Manager	1/12/2019	46	FFD 2/8/2019. Interviews are scheduled.
OSI	Information Technology Specialist I	Developer	7/1/2017	606	DS under construction
OSI	Information Technology Specialist I	Contract and Procurement Analyst	2/21/2019	6	Screening applicants; interviews expected in mid-March.
OSI	Information Technology Specialist II	DevOps Engineering	7/1/2017	606	Applicants under review
OSI	Information Technology Specialist II	Application Architect	7/1/2017	606	DS under construction
OSI	Information Technology Supervisor II	Data Management	7/1/2017	606	Position is being reclassified and redirected to another area of the Project.
OSI	Information Technology Supervisor II	QA Engineering	7/1/2017	606	Position on hold.
CDSS	AGPA	Administrative Support	9/25/2018	155	Position pending CDSS re-organization approval.
CDSS	Staff Services Manager II	Program Policy Manager	2/28/2019	1	Interviews being held 2/22/19.
CDSS	Staff Services Manager I	Intake Product Owner	7/25/2018	217	Appointment packet submitted to CDSS HR 2/26/2019
CDSS	AGPA	Administrative Support	10/12/2018	138	Position pending CDSS re-organization approval.
CDSS	AGPA	Program Policy	9/1/2018	179	Position pending CDSS re-organization approval.
	Filled Positions				
OSI	Information Technology Manager I	Information Security Chief	8/8/2017	568	Formal Offer Accepted. Start date of 3/4/2019

RISKS

For this reporting period, there were no new high-level risks opened, no high-level risks closed and there is currently a total of two (2) high priority risks to report being tracked and managed on the project for the month of February.

Risk	Impact	Mitigation		
Continued Risks				
The current approach to the two-factor authentication is to use a code sent via an e-mail to the user, which can be restricting for County workers when email outages occur. RI-35	In the event of a County e-mail outage, the child welfare workers may not have access to the CWS-CARES system. As designed, their initial logon is tied to another system that is different in each County.	CWDS Security Officer to Contact CDSS Security Officer to approve rolling back to one factor authentication. Roll back to one factor authentication. Research alternate authentication methods with counties that can be selected by the user at the time of the login (phone call, text, e-mail). Communicate to all stakeholders how and when to use these options.		
If DevOps dependencies are not clearly identified, it will impact the ability to deliver code on time. RI-75	Delayed delivery of code.	Teams need to take time to identify dependencies and communicate them early and frequently. There should be a due date established for the Development Team to report all tickets where DevOps support is needed for the next release in October.		

ISSUES

For this reporting period, there was one (1) new high-level issues created, no high-level issues closed and are currently nine (9) high priority issues being tracked and managed on the project for the month of February.

Issue	Impact	Resolution
New Issues		
Lack of dedicated QA Automation Engineering Resources RI-105 Opened 2/13/2019	The lack of dedicated QA Automation engineering resources to support the automate test scripts and support CWDS automation tests in the future (integration tests, and regression tests) limits the quality and overall coverage	Manual QA engineers and Development teams to create automated test scripts in Selenium based on happy path regression testing scenarios within pre-int and int environments. Adjust scripts with any additional updates needed to run in production like dataset. Identified QA and Development resources to run automated test scripts during Sprint and work to resolve any SEV 1 defects.
Continued Issues		uny de vir dorono.
Information regarding test processes and procedures, plan testing activities, and status reports of quality assurance (QA) activities are not being reviewed directly by project leadership when determining the readiness of software for release. RI-95	Potential impact on quality of software being released.	Adoption of an enterprise test management tool to store test processes and procedures, plan testing activities, and status reports of quality assurance (QA) activities.
A few incidents were reported with the release of CARES 2.0 that impact the accuracy and displaying of current data in search results and in Snapshot cards. Communication was sent to the Orgs when a fix was identified for the underlying problem, not when the incidents were identified as impacting search results and Snapshot information. Impacts of using this inaccurate data potentially impact child safety. RI-92	If users are not notified in a timely manner of high priority and critical bugs in CWS-CARES, this could affect decisions made by CWS-CARES users based on inaccurate data which may ultimately impact child safety.	Solidify internal communication framework Follow communication protocols to notify users regarding bugs ranked high and critical Provide updates to users on potential interim processes and planned hot fix dates Daily prioritization of bugs
Lack of a defined trigger date and scope lock for a release from the Development Team is impacting the Implementation Team's ability to initiate preparation activities, e.g., communication, training materials and OCM activities RI-33	Organizations may not have time to prepare for or execute OCM, training, and implementation activities. This may result in an organization delaying the use of functionality if they are not prepared. This may also cause more organizations to stack within a given timeframe, limiting the implementation team's ability to support the organizations while they transition from CWS/CMS to the Intake Digital Service.	Adherence to "hands off code" as defined in the Product Release Roadmap will enable the Implementation Team to have full understanding what is in the release, who is impacted, the extent of the impacts, and provide the counties with the appropriate information for preparedness activities and a predictable implementation schedule. Prevention of scope creep to ensure delivery and all supporting implementation preparedness materials (trainings, business process impacts, audience analysis, readiness activities) aligns with communication to CARES users.
There is no formal process in place to ensure knowledge is transferred from vendors to state staff during the vendors transition off the Project as their contracts approach expiration. RI-81	Crucial Project specific knowledge is lost when backups are not identified nor a process in place to transfer knowledge between vendors and state staff.	Ensure an exit strategy clause is included in vendor contracts. Implement a knowledge transfer process to be executed continually throughout Project."

Issue	Impact	Resolution
The current process to support decisions regarding prioritization that also factors in dependencies and impacts of what is not chosen as priorities is subjective, which creates difficulty in strategizing releases effectively. RI-77	The Project's ability to identify future releases impacts development priorities.	 Develop a product strategy driven by business priorities to show dependencies and how to build. Develop a more objective process that can quantify business value and level of difficulty, which also includes dependencies. A product decision making framework was approved by the Executive Leadership Team."
Without a definition of "Done" established for the Blueprint, measurement of the Projects progression on the Roadmap is difficult to gauge.	Difficulty for the Blueprint to define the project's as-is (Where are we now?) and to-be (Where are we going?) states, as well as identify enterprise level needs, approaches, and solutions (How do we get there?).	 Obtain a definitive decision on the definition of "Done." Communication of decided definition to all teams on Project.
Without a definition of "Done" established for the Legacy Strategy, measurement of the Projects progression on the Roadmap is difficult to gauge. RI-57	Difficulty to define the project's as-is (Where are we now?) and to-be (Where are we going?) states, as well as identify enterprise level needs, approaches, and solutions (How do we get there?).	 Obtain a definitive decision on the definition of "Done." Communication of decided definition to all teams on Project.
The project added four senior engineering resources to support DevOps in the completion of the delivery pipeline. However, it is unclear that the addition of these resources have made a significant impact toward reaching this goal, as the project continues to struggle with consistency across environments, environment availability, along with other technical challenges. A maturity assessment would shed light on this concern. RI-58	Pipeline development is unclear. Continuous lack of consistency across environments and environment unavailability.	1. When a new Independent Verification and Validation (IV&V) contract is executed, the vendor to perform a maturity assessment within the first 30 days on the DevOps team and the delivery pipeline. The assessment should consider: - Pull request automation and peer review. - Test automation, including code coverage and build failure threshold configuration. - Integration of code review, build, deployment, and issue tracking tools, including integrated workflow. - Security of code repositories, including access and change permission restrictions. - Audit logging of build, test, and deploy results - Failover and disaster recovery automation, including deployment rollback capability.

BUDGET/EXPENDITURES

AS OF FEBRUARY 28, 2019

2018-19 CWS-CARES Budget/Expenditure Report Summary

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OSI Spending Authority Budget Item	2018-19 Budget	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections	
Personnel Services*	9,935,256	1,436,178	6,546,115	7,982,293	
Other OE&E**	5,717,563	1,071,752	4,033,669	5,105,421	
Data Center Services**	2,660,542	1,623,152	1,037,390	2,660,542	
Contract Services**	55,892,379	16,779,430	23,051,487	39,830,917	
Enterprise Services*	5,420,394	550,227	836,174	1,386,401	
OSI Spending Authority Total	79,626,134	21,460,739	35,504,835	56,965,574	
CDSS Local Assistance Budget Item	2018-19 Budget	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections	
Contract Services***	1,074,180	268,916	635,040	903,956	
Other OE&E***	3,400,732	-	3,400,732	3,400,732	
County Participation Costs***	19,157,746	335,418	18,822,328	19,157,746	
CDSS Local Assistance Total	23,632,658	604,334	22,858,100	23,462,434	
CDSS State Operations Budget Item	2018-19 Budget	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections	
Personnel Services****	1,930,359	1,103,236	827,123	1,930,359	
Facilities****	568,000	600	567,400	568,000	
Other OE&E****	224,497	9,623	214,874	224,497	
CDSS State Operations Total	2,722,856	1,113,459	1,609,397	2,722,856	

^{*} Actuals through November 2018 per FI\$Cal Report

CW S-CARES Project Total 105,981,648 23,178,532 59,972,332

Note: The adjustments to the OSI line item spending authority were made to better align with the Project's focus of one product feature set at a time.

83,150,864

^{**} Actuals from November 2018 Fi\$CAL Reports, in addition to processed invoices through February 27, 2019

^{***} Actuals from CDSS as of December 2018